Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	CC Docket No. 95-116
Telephone Number Portability	)	RM 8535

COMMENTS OF TELEPORT COMMUNICATIONS GROUP INC.

J. Manning Lee
Vice President, Regulatory Affairs
Two Teleport Drive, Suite 300
Staten Island, N.Y. 10311
Its Attorney

Gail Garfield Schwartz
Vice President
Public Policy and Government Affairs

Kenneth A. Shulman
Senior Vice President
Technology

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COMMENTS OF TELEPORT COMMUNICATIONS GROUP INC.

TELEPHONE NUMBER PORTABILITY

SUMMARY

The Commission should act promptly to ensure national uniformity of standards for Service Provider Number Portability (SPNP) and a phased-in deployment schedule that will permit national competitive local exchange carriers like TCG to operate efficiently in all markets. Specifically, the Commission must promptly establish criteria for a SPNP architecture and a "date certain" for SPNP deployment in the top 100 markets.

Service Provider Number Portability must be required of all carriers and must be achieved through a database solution. Remote call forwarding and DID arrangements proposed by some incumbent LECs as so-called "interim" number portability are simply "quick fixes" that do not represent a true industry standard of efficient and seamless integration of solutions across multiple carriers.

Any SPNP solution must be meet these criteria:

1. SPNP must not cause loss of functionality, quality, or access to today's local or toll services. SPNP must not negatively affect custom calling features, call setup time, operator services, 911, E911, directory assistance, or call intercept.

2. Existing network infrastructure and standards must not be undermined or degraded.

3. The solution must support both wireline and wireless services efficiently.

4. Called party number information must be available for ported and non-ported numbers.

5. The solution should help conserve North American Numbering Plan (NANP) numbers, specifically it should allow efficient sharing of newly opened NXXs (i.e. pooling of dialable numbers) for new customers among LECs. The solution should not inhibit eventual efficient migration into other forms of number portability in addition to SPNP, at a reasonable cost.

6. The solution should impose equivalent relative obligations

and benefits on all local exchange carriers. Incumbent LECs and CompLECs should be required to deploy the same network capabilities.

7. The solution should balance involvement of and investment by LECs and IXCs.

8. The solution must be provided in the open public domain, free of any licensing fees, so that all vendors and all carriers face the same technical requirements and economic feasibility when deploying SPNP capability.

9. There must be no impact on ported Service Access Codes (non-geographical numbers, 500 800, 900) which must be usable by their original subscriber regardless of whether the subscriber changes carriers.

The Commission should establish the criteria for network interconnection and the model for processing of calls that will be "ported" from one local exchange carrier to another. The industry should select the architecture or topology that meets the standards most efficiently and effectively.

The Commission should require that all costs of number portability be borne by the carriers that implement it. All customers of all carriers will benefit from SPNP. The costs of SPNP are not deterrents to its swift deployment in the phased-in pattern recommended herein, especially because number portability is supported by network upgrades that carriers are deploying for other reasons besides number portability.

While the Commission should not deter any of the efforts underway or contemplated within the states to develop an SPNP architecture, TCG would suggest the Commission mandate that after its standards are promulgated, any SPNP solution be in compliance with those standards.

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COMMENTS OF TELEPORT COMMUNICATIONS GROUP INC. (TCG)

Teleport Communications Group Inc. (TCG), pursuant to the Commission's July 13, 1995 Notice of Proposed Rulemaking in the above-captioned matter,[1] hereby offers the following comments.

I. TCG'S Interest in Number Portability.

TCG, the nation's largest competitive local telecommunications provider for business and long distance carriers, commends the Commission for issuing the NPRM at this critical time in the evolution towards local exchange competition. TCG's state-of-the-art, two-way self-healing fiber rings now serve customers in 37 major markets. TCG's potential new customers have a substantial investment associated with their current telephone numbers. As a consequence, they are reluctant to change local exchange service provider if in so doing they will also have to change their

[1]Telephone Number Portability, CC Docket No. 95-116, Notice of Proposed Rulemaking (NPRM), FCC 95-284 (released July 13, 1995).

telephone number. Many simply would not select a new local service provider if a telephone number change were necessary. TCG's own sales force has been told by many potential customers who otherwise would place substantial orders with TCG that they will not consider changing their telephone numbers.

TCG has been an active participant in several trials of number portability, and intends to participate in other trials in the future, including the Seattle, Washington, trial with Electric Lightwave, Inc., GET, GTEINS, Stratus Computers, U.S. Intelco and U S WEST Communications; the New York trial with MFS, MCI, NYNEX, Time Warner, Rochester Telephone Company, Sprint, AT&T, and Locate; and trials in Maryland and California with numerous parties.

TCG is a member of the Ad Hoc Coalition of Competitive Carriers and fully supports that organization's independent comments in this proceeding. In its own separate comments, TCG wishes to emphasize the need for the Commission to quickly promulgate technical criteria against which any number portability solution or architecture must be evaluated, and establish a date certain for the implementation of Service Provider Number Portability in all major markets.

II. Number Portability is Clearly in the Public Interest.

TCG fully concurs with the tentative conclusion of the NPRM that the portability of geographic telephone numbers (with area codes that represent specific geographic areas) will benefit consumers and will contribute to the development of competition among alternative providers of local telephone and other telecommunications services, thus giving both business and residential customers better services and lower prices.[2] TCG also agrees that the FCC should assume a leadership role in developing a national number portability policy, owing in large measure to the impact that policy will have on interstate telecommunications.

Legislation under consideration in both houses of Congress would, if enacted, establish number portability as an essential prerequisite of local exchange competition and would give primary responsibility for developing a national number portability mechanism to the FCC. State legislatures have also recognized the need for number portability. In 1995 alone, thirteen state legislatures explicitly recognized number portability as fundamental to local exchange competition.

Technical trials and/or regulatory proceedings are presently underway in Illinois, Washington and New York with a view to establishing guidelines for number portability within their jurisdictions. In Illinois an industry task force appears to have adopted by consensus an architecture that could be one possible

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[2]See NPRM at ¶¶ 2-7.

permanent national number portability solution.[3] TCG concurs with the Commission's conclusion that state regulators have a legitimate interest in the development of number portability; however, as discussed further below, the Commission must ensure that any state solution become permanent only when it conforms to national standards established by the Commission.

The Department of Justice has also recognized the significance of number portability in its motion for a modification of the MFJ to permit Ameritech to engage in a trial of Interexchange service in a limited territory. The DOJ required Ameritech to implement full number portability prior to commencement of that experiment, unless Ameritech shows that it cannot meet the condition.[4]

Clearly, number portability is in the public interest. The issue is no longer whether number portability should be required, but how it should be implemented, and how soon consumers will enjoy its benefits.

III. Service Provider Number Portability Must Be Required of All Carriers If Local Exchange Competition is to Become Robust and Widespread.

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[3]The architecture in use in Illinois is the AT&T Location Routing Number plan.

[4]See Memorandum of the Department of Justice on Ameritech Plan, filed June 30, at 14.

TCG has identified nine preconditions that are essential for true competition to exist within local exchange markets.[5] The second of these is number portability, which is no more or less than equal rights to and control over number resources. Service Provider Number Portability (SPNP) is the ability to change one's local service provider within a telephone service area without changing one's telephone number.

SPNP is distinguished from Location Number Portability, which is the ability to change locations anywhere without the necessity of changing one's telephone number; and Service Portability -- the ability to change one's type of service without changing one's telephone number. Although the NPRM seeks comment on both Location Portability and Service Portability, it is neither necessary nor desirable to address those topics at this time. Some forms of Service Portability, such as retention of a number by a customer upgrading to ISDN but remaining in the same location, may be technically feasible now. Some forms of Location Portability, such as retention by a customer of a number when relocating within an exchange area, are also available now. But neither of these forms

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[5] The nine points are: (1) Reciprocal intercarrier compensation arrangements; (2) Local telephone number portability; (3) Central Office interconnection arrangements (4) Connections to unbundled network elements; (5) Seamless integration into LEC interoffice networks; (6) Seamless integration into LEC signaling networks; (7) Equal status in/control of network databases; (8) Equal rights to and control over number resources; and (9) Cooperative practices and procedures.

of portability has the same potential impact on customer choice and competitive opportunities as Service Provider Number Portability. Nor are either of these forms of number portability material to the question of a customer's ability to change local service providers without suffering inconvenience or disadvantage.

Thus TCG urges the Commission to focus its present attention uniquely on SPNP. Consideration of Location Portability or Service Portability -- particularly if the emphasis is placed in simultaneous deployment of these capabilities together with SPNP -- will in fact serve only to delay, needlessly complicate, and make much more expensive the essential and important task of implementing SPNP. At the same time, it would be appropriate for the Commission in evaluating national solutions or architectures for SPNP to consider, among other criteria, its potential to accommodate other forms of Number Portability in the future.

IV. Service Provider Number Portability Must be Achieved Through a Database Solution.

Many incumbent local exchange carriers have incorrectly characterized existing subscriber services such as Remote Call Forwarding or Direct Inward Dialing as interim number portability solutions. These services are, however, nothing more than inadequate quick fixes that will serve to entrench the incumbent

monopolist, disadvantage the new entrant, and undermine the evolution of true SPNP.

These so-called interim arrangements suffer from a host of deficiencies. For example, these services require that all calls be processed by the incumbent local exchange carrier's network. This necessarily means that the incumbent LEC has access to information about all of its competitor's customers -- it knows the kind and type of the customers' incoming calls, what long distance companies place calls to that customer, and the like. Moreover, the incumbent LEC receives interstate and intrastate switched access and local transport revenues for every single toll call completed to those customers. These interim arrangements also introduce an increased potential for call blocking, since each call must be routed to two end offices, add another failure point into the call path, and require additional call processing and its attendant potential for call set up delays. Moreover, these interim arrangements will also exacerbate the national number depletion problem, because two National Numbering Plan NXX-XXXX numbers are required for each customer whose calls are to be "ported" to an alternative carrier. In sum, call forwarding and DID simply do not represent a true industry standard of efficient and seamless integration of solutions across multiple carriers.

True Service Provider Number Portability can only be provided by means of an enhanced call model utilizing a network of distributed databases.

V. The Commission Must Require National Standards for A Data Base Version of SPNP so that New Entrants Do Not Face an Array of Varying Network Architectures.

To make it possible for all carriers to provide SPNP, regardless of where they are operating, all switches of all vendors must be adapted to a national standard at a reasonable cost. This can only be achieved through a strong national standard, so that vendors can implement it with confidence that they can then sell their switches for use in any state, and that their switches can effectively interoperate with the products of other vendors. Absent a national standard, it would simply be too costly for each vendor to evaluate the proposals of other vendors and to test all proposals for interoperability, or to implement varying software designs from place to place. Because during the time the national standard is being developed states will likely proceed with initiatives already underway, the Commission must require that any solution adopted by any state be in compliance when the Commission promulgates its final rules regarding the national standards.

These national standards must be flexible enough to allow easy market entry by all vendors. Nevertheless, the Commission must require all switch vendors to certify that they do meet the national standards and that their equipment will be satisfactory for interconnection to any other vendors' equipment for the purpose of number portability. In this way switch vendors will be able to develop their software in the most efficient and least costly

manner, and have a product that is compatible throughout the NANP. Such national standards will also make it much easier for carriers to develop nationally standard administrative procedures for the implementation of number portability, thereby minimizing operational costs.

These national standards must be established for digital end office and tandem switches, for Signal Transfer Point and SS7 network functionalities, and for Local Number Portability (LNP) database vendors. The logical contents of any distributed LNP databases should be determined by an industry group subject to meeting the Commission's criteria. The standards should not artificially restrict the potential designs for the various database(s) of ported numbers. The industry itself will ultimately determine which of the various system designs -- a national database, regional databases, carrier databases -- will interact most efficiently, how to accommodate carriers too small to maintain their own databases, and the like.

Short term or interim database number portability solutions that may be authorized by or encouraged by states should not be precluded by the Commission, which should devote its resources to arriving at a single national set of standards which must be analyzed by each vendor for implementation in its equipment. The Commission should, however, encourage the states to ensure that any short term or interim database solution does not impede migration to an optimal long term Service Provider Number

Portability architecture. The Commission should focus its attention on setting the technical standards against which a permanent SPNP solution will be tested. TCG would suggest that the Commission mandate that one its national standards are announced, any existing solution, architecture or topology must be brought into compliance within eighteen months.

VI. The Service Provider Number Portability Rule Should Establish the Criteria for Network Interconnection and the Model for the Processing of Ported Calls

The Commission's Rule should establish the requirements for network interconnection and the general model for how ported calls are to be processed. It should not, however, specify a specific architecture, solution or topology, for these must be tested in the marketplace. Industry expertise should be relied upon to determine the items of data required to be passed between networks and the locations for these items of data in network protocols. The FCC's rule should not attempt to specify these detailed technical criteria, but instead should require that these call processing items be standardized. Any call processing model must use these data items correctly in processing all types of calls in order to meet the technical criteria established by the Commission's rule.

TCG would suggest that the Commission adopt the following criteria for number portability:

1. SPNP must not cause loss of functionality, quality, or access to today's local or toll services. SPNP must not negatively affect custom calling features, call setup time, operator services, 911, E911, directory assistance, or call intercept.

2. Existing network infrastructure and standards must not be undermined or degraded.

3. The solution must support both wireline and wireless services efficiently.

4. Called party number information must be available for ported and non-ported numbers.

5. The solution should help conserve North American Numbering Plan (NANP) numbers, specifically it should allow efficient sharing of newly opened NXXs (i.e. pooling of dialable numbers) for new customers among LECs. The solution should not inhibit eventual efficient migration into other forms of number portability in addition to SPNP, at a reasonable cost.

6. The solution should impose equivalent relative obligations and benefits on all local exchange carriers. Incumbent LECs and CompLECs should be required to deploy the same network capabilities.

7. The solution should balance involvement of and investment by LECs and IXCs.

8. The solution must be provided in the open public domain, free of any licensing fees, so that all vendors and all carriers face the same technical requirements and economic feasibility when deploying SPNP capability.

9. There must be no impact on ported Service Access Codes (non-geographical numbers, 500 800, 900) which must be usable by their original subscriber regardless of whether the subscriber changes carriers.

VII. Number Portability Must be Implemented by a Date Certain.

Incumbent LECs have proprietary interests at stake which Number Portability threatens. Therefore the Commission must

establish a specific and definite timetable for the implementation of SPNP. Without such a specific requirement, the incumbent LECs are not likely to move as swiftly as possible to implement SPNP. As shown by the industry in its adoption of 800 number portability, only a mandate from the Commission will lead to the swift adoption of nationwide number portability solution.

The first date certain for SPNP implementation should be a deadline for the development of a standard for national number portability, which should be one year from the date of this filing.

The second date certain should be the date for carrier implementation of SPNP. The Commission should require all carriers to provide SPNP in the top 100 markets no later than 24 months after the issuance of an order in this proceeding. This will phase in SPNP in accordance with concentrated market demand and send appropriate market signals to switch vendors. To assure that customers in smaller locations are not deprived of the opportunity to enjoy SPNP, the Commission should require that, in response to a *bona fide* request by an eligible carrier, the incumbent carrier shall make number portability available in smaller markets within twenty four months.

VIII. Number Portability Database Ownership and Management Must Meet the Test of Competitive Neutrality.

The Commission should require that administration of the primary number portability database or databases must be the responsibility of a neutral party unaffiliated with any carrier. This is essential to avoid conflict of interest or perpetuating bottleneck control. The Commission should direct the industry to propose a competitively neutral plan for ownership and management of the number portability database(s) as part of its proposed number portability architecture.

IX. The Commission Should Adopt Guidelines for Equitable Recovery by Carriers of the Costs of Number Portability.

The total costs of number portability cannot be determined by the Commission at this time. Moreover, the incremental costs of deploying SPNP are diminished because the SS7, IN and AIN technologies upon which a database number portability solution depends are already being installed by carriers throughout the industry for purposes other than number portability. These incremental number portability costs may therefore turn out to be lower than many estimates suggest, particularly in light of the phased-in requirements with TCG is recommending. But because SPNP is a national infrastructure investment that benefits all customers and all carriers, and because it is a cost that all carriers will incur themselves in upgrading their networks to process calls, the Commission should require that all costs of number portability

implementation be borne by the carriers that incur them. The carriers may recover these costs as they recover any other normal network upgrade costs. In this way any economic burdens will be shared equitably among all beneficiaries of number portability, which are all customers of all carriers.

Requiring that carriers bear their own costs of compliance also reflects the fact that any charges which Carrier A might wish to impose on Carrier B for Carrier A's costs of implementing number portability will be offset by the costs that Carrier B is incurring, and which it might wish to impose on Carrier A. Rather that involving the Commission and carriers in a fruitless 'tail chasing' exercise as each seeks to impose costs on the other, the Commission should mandate that these costs be incurred and recovered by each carrier as part of its ordinary operations.

X. The Commission Must Encourage the Industry to Meet its Schedule and Conform to its Standards, but Should Not Appoint an Advisory Committee on Number Portability at This Time.

The industry, given the appropriate mandates and incentives, is capable of coming to agreement on an SPNP architecture. The Industry Numbering Committee Number Portability Workshop (INC) has extensive analyzed the technical issues surrounding SPNP (also referred to in that committeee as Local Area Number Portability or

LANP).[6] At this point in time the Commission need not and should not appoint an advisory committee under the Federal Advisory Committee Act, because experience suggests that this would delay rather than accelerate the process of testing number portability solutions. However, the Commission must set out the two-year time frame for initial deployment of SPNP, together with interim milestones within which the industry standards committees must operate.

In the event that the industry fails to make adequate progress, the Commission should require LECs to solicit concrete, auditable program development and installation proposals and costs from all the vendors of each type of switch currently in use in that carrier's applicable central offices that would be affected by number portability.

To give incumbent LECs the incentive to move forward with number portability implementation, the Commission should consider economic incentives, such as discounts for services needed by competitors during the transition to true number portability. LECs certainly should not be permitted to impose any additional or separate charges for inferior interim number portability solutions such as remote call forwarding. Moreover, any interconnection-related charges should be significantly discounted to account for the diversion of revenue from competitive local exchange carriers

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[6]See INC's PORT-82 which describes the latest enhancements to LANP.

to incumbent LECS that occurs in the absence of true number portability. The Commission has long recognized that new entrants, when given inferior or second class services by the incumbent are entitled to a substantial discount, and this principle applies equally here.[7] "Such" "discounted" arrangements can be phased out as true database number portability becomes available, and indeed such a phase will itself serve as a substantial and important financial incentive for the LECs to proceed with haste to make these arrangements available.

XI. Conclusion.

Because number portability requires a complex series of technical decisions, the Commission should act promptly to ensure national uniformity of standards and a phased-in deployment schedule that will permit national competitive local exchange carriers like TCG to operate efficiently in all markets. Prompt implementation of such a program will provide substantial benefits to the general public, by giving customers the freedom to select a new local carrier without suffering a penalty through loss of their

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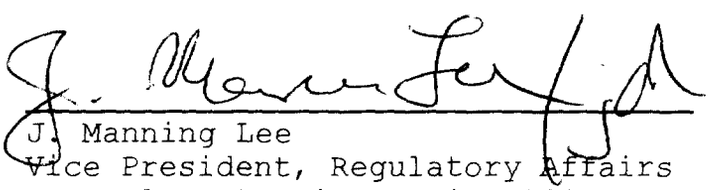
[7]For example, the Commission granted competitive long distance carriers substantial interconnection charge discounts for the inferior ENFIA arrangements (early forms of switched access) which the pre-divestiture AT&T made available to them. Even after divestiture, substantial discounts continued to be applied to inferior line-side interconnections, with those discounts being phased out as equal access became available.

telephone number, or retention of their number only under the inferior conditions of the so-called interim number portability arrangements.

Respectfully submitted,

TELEPORT COMMUNICATIONS GROUP INC.

By 

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